Cerebrolysin for vascular dementia (Review)
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Introduction
Vascular dementia is a common disorder without definitive treatments. Cerebrolysin is reported to be effective in treatment of VaD in some clinical trials, but there is no compelling evidence. So, to guide clinical practice and studies, it is necessary to systematically review the efficacy and safety.

Methods
We searched ALCES – the Cochrane Dementia and Cognitive Improvement Groups’ Special Register using the terms Cerebrolysin, Cere, FPF1070, and FFT-1070. ALCES contains records of clinical trials identified from monthly searches of a number of major healthcare databases, numerous trial registers and grey literature sources. All randomized controlled trials of Cerebrolysin for treating vascular dementia were eligible for inclusion. No language restriction were retrieved for analysis. Two authors independently selected trials and evaluated the methodological quality, then extracted and analyzed data from the included trials. We identified six trials involving 597 participants suitable for inclusion in this review (Fig 1-2).

Fig. 1. Risk of bias summary: review authors’ judgements about each risk of bias item for each included study

Fig. 2. Clinical trials of Cerebrolysin in VaD included in the Cochrane review

Results
The meta-analysis revealed a beneficial effect of Cerebrolysin on general cognitive function measured by mini-mental state examination (MMSE) (weighted mean difference [WMD] 1.10; 95% confidence interval [CI] 0.63 to 1.57) or Alzheimer’s Disease Assessment Scale Cognitive Subpart, extended version (ADAS cog-X; WMD -4.01; 95% CI -5.61 to -2.42). The major results are summarized on Fig 3-5.

Conclusion
Cerebrolysin may have positive effects on the improvement of cognitive function and global function in older patients with VaD of mild to moderate severity. Most side effects related to Cerebrolysin are rated as mild to moderate in severity. However, due to the limited number of included trials, variable treatment duration and short-term follow-up, there is insufficient evidence to recommend Cerebrolysin as a routine treatment for patients with VaD. Further, it is difficult for it to be used widely since this medicine must be given by intravenous infusion with a long-term, demanding treatment.

Related references
1. Original article: The Cochrane Collaboration; published in The Cochrane Library 2013, Issue 1